

What is Claimed is:

*add 914*

1. A brake system for a straddle-type ATV, the brake system comprising:
  - a brake caliper configured to mount to a gear box of the ATV;
  - a brake disk configured to connect to a coupling member of the gear box coupled to a shaft and positioned in operative relation relative to the caliper; and
  - a brake-actuating control mechanism in communication with the brake caliper, the brake-actuating control mechanism controlling the brake caliper to provide selective frictional engagement between the brake caliper and the brake disk.
2. A brake system according to claim 1, further comprising a bracket configured to connect at a first end thereof to a housing of the gear box, wherein the caliper is rigidly connected to the bracket at a second end thereof.
3. A brake system according to claim 1, wherein the brake caliper is configured to mount to the gear box adjacent a drive shaft and the brake disk is configured to couple to the drive shaft via the coupling member.
4. A brake system according to claim 3, wherein the brake disk is configured to connect to a yoke of the drive shaft.

5. A brake system according to claim 4, wherein the brake disk includes a plurality of radially inwardly extending connecting portions, the connecting portions being securable to a cooperating plurality of flange elements of the yoke.

6. A brake system according to claim 3, wherein the brake disk includes a plurality of radially inwardly extending connecting portions securable to cooperating flange elements of the coupling member.

7. A disk brake system according to claim 1, wherein the brake caliper is configured to mount to the gear box adjacent a half-shaft and the brake disk is configured to couple to the half-shaft via the coupling member.

8. A disk brake system according to claim 7, wherein the brake disk is one of a pair of brake disks, the brake disks being configured to couple to respective coupling members of the gear box, and the brake caliper is one of a pair of brake calipers, the brake calipers being configured to mount to the gear box adjacent respective coupling members.

9. A disk brake system according to claim 8, wherein the brake calipers are configured to mount to opposite sides of the gear box adjacent respective brake disks.

10. A disk brake system according to claim 8, wherein the brake-actuating control mechanism is operatively connected to each of the brake calipers,

such that each of the brake calipers is manipulable by a user via the brake-actuating control mechanism.

11. A straddle-type ATV comprising:

a plurality of wheels;

a frame;

a power unit coupled to the frame and constructed and arranged to provide power to at least one of the plurality of wheels;

a transmission coupled to the power unit;

a gear box connected to the frame and in spaced relation to the power unit and the transmission, the gear box being operatively connected to the transmission via a drive shaft;

a pair of wheel assemblies that support the plurality of wheels;

the wheel assemblies being communicated to the gear box;

a brake system including a brake caliper configured to mount to the gear box;

a brake disk configured to connect to a coupling member of the gear box coupled to a shaft and positioned in operative relation relative to the caliper; and

a brake-actuating control mechanism in communication with the brake caliper, the brake-actuating control mechanism controlling the brake caliper to provide selective frictional engagement between the brake caliper and the brake disk.

12. An ATV according to claim 11, wherein the coupling member is a yoke of a universal joint coupled to the shaft.

13. An ATV according to claim 11, further comprising a bracket configured to connect at a first end thereof to a housing of the gear box, wherein the caliper is rigidly connected to the bracket at a second end thereof.

14. An ATV according to claim 11, wherein the brake caliper is mounted to the gear box adjacent the drive shaft and the brake disk is coupled to the drive shaft via the coupling member.

15. An ATV according to claim 14, wherein the drive shaft includes a universal joint including a yoke coupled to the gear box and the brake disk is connected to the yoke.

16. An ATV according to claim 15, wherein the yoke includes a plurality of flange elements extending radially outwardly therefrom and the brake disk includes a respective plurality of radially inwardly extending connecting portions, which are secured to the flange elements.

17. An ATV according to claim 14, wherein the gear box includes a coupling member coupled thereto, the coupling member including a splined recess therein, and an end of the drive shaft is provided with a series of cooperating splines, the splined end of the drive shaft being received within the splined recess and the brake disk is connected to the coupling member.

18. An ATV according to claim 17, wherein the coupling member includes a plurality of radially outwardly extending flange elements and the brake

disk includes a respective plurality of radially inwardly extending connecting portions securable to the flange elements.

19. An ATV according to claim 11, wherein the brake caliper is mounted to the gear box adjacent a half-shaft and the brake disk is coupled to the half-shaft via the coupling member.

20. An ATV according to claim 19, wherein the brake disk is one of a pair of brake disks, the pair of brake disks being coupled to a respective pair of coupling members of the gear box and the brake caliper is one of a pair of brake calipers mounted to the gear box adjacent respective coupling members.

21. An ATV according to claim 20, wherein the brake calipers are mounted to opposite sides of the gear box.

22. An ATV according to claim 21, wherein the brake-actuating control mechanism is operatively connected to each of the brake calipers, such that each of the brake calipers is manipulable by a user via the brake-actuating control mechanism.

23. An ATV according to claim 11, wherein the gear box is a differential type gear box.